

Amendments to the Claims

Please cancel Claims 85-113. Please add new Claims 114-141. The Claim Listing below will replace all prior versions of the claims in the application:

Claim Listing

1.-113. (Canceled)

114. (New) A blend comprising a first PHA and a second PHA, wherein:

the first PHA is a copolymer having a comonomer 1-A and a comonomer 1-B and the second PHA is a copolymer having a comonomer 2-A and a comonomer 2-B;

the first PHA copolymer and the second PHA copolymer are the same copolymer, in which the ratio of comonomer 1-A:comonomer 1-B in the first PHA is different from the ratio of comonomer 2-A:comonomer 2-B in the second PHA.

115. (New) The blend of Claim 114, wherein comonomer 1-A and comonomer 2-A are both 3-hydroxybutyrate.

116. (New) The blend of Claim 115, wherein comonomer 1-B and comonomer 2-B both are 3-hydroxypropionate, 4-hydroxybutyrate, 3-hydroxyhexanoate, or 3-hydroxyoctanoate, 3-hydroxypropionate, 6-hydroxyhexanoate, 3-hydroxydecanoate, 3-hydroxydodecanoate, or 3-hydroxydodecenoate.

117. (New) The blend of Claim 116, wherein comonomer 1-B and comonomer 2-B both are 4-hydroxybutyrate.

118. (New) The blend of Claim 114 additionally comprising a third PHA.

119. (New) The blend of Claim 114, wherein when the first PHA and the second PHA are blended and the blend is molded, the blend has a deformation angle tolerance of at least about 5 °.

120. (New) The blend of Claim 114, wherein when the first PHA and the second PHA are blended and the blend is molded, the blend has a thermal deformation resistance temperature of at least 80 °C.
121. (New) The blend of Claim 114, wherein the first PHA has a first glass transition temperature and the second PHA has a second glass transition, wherein the difference between the first and second glass transition temperature is at least about 1 °C.
122. (New) An article comprising at least about 1 percent by weight of the PHA blend of Claim 114.
123. (New) A method of preparing the PHA blend of Claim 114, wherein the method comprises blending the first PHA with the second PHA.
124. (New) The method of Claim 123, wherein the blending of the first and second PHAs is by solvent blending, emulsion blending or melt blending.
125. (New) The method of Claim 124, wherein the PHA blend is prepared using solvent blending.
126. (New) The method of Claim 125, wherein:
 - (i) the PHA components are dissolved in a solvent or solvent mixture, or the PHA components are dissolved separately in a solvent or solvent mixture and combined to form a blended PHA solution containing at most about 50 weight percent of the PHA components;
 - (ii) the PHA solution is applied to a surface to form a PHA blend solution layer on the surface; and
 - (iii) some or all of the solvent is removed to form a PHA blend layer on the surface.
127. (New) A method of making the article of Claim 122, wherein the method comprises molding the PHA blend.

128. (New) A blend comprising a first PHA and a second PHA, wherein:
the first PHA is a poly(3-hydroxybutyrate) homopolymer; and
the second PHA is a copolymer having a first and a second comonomer, wherein
the first co-monomer is 3-hydroxybutyrate and the second comonomer is 4-hydroxybutyrate.
129. (New) The blend of Claim 128, wherein the copolymer has at most about 3 weight percent, or at most about 15 weight percent of one comonomer.
130. (New) The blend of Claim 128, wherein the blend comprises poly 3-hydroxybutyrate blended with poly 3-hydroxybutyrate-co-11%-4-hydroxybutyrate; or poly 3-hydroxybutyrate blended with poly 3-hydroxybutyrate-co-33%-4-hydroxybutyrate.
131. (New) The blend of Claim 130, wherein the blend comprises at most about 20% poly 3-hydroxybutyrate.
132. (New) The blend of Claim 130, wherein the blend comprises at most about 60% poly 3-hydroxybutyrate.
133. (New) The blend of Claim 128 additionally comprising a third PHA.
134. (New) The blend of Claim 128, wherein when the first PHA and the second PHA are blended and the blend is molded, the blend has a deformation angle tolerance of at least about 5°.
135. (New) The blend of Claim 128, wherein when the first PHA and the second PHA are blended and the blend is molded, the blend has a thermal deformation resistance temperature of at least 80 °C.
136. (New) An article comprising at least about 1 percent by weight of the PHA blend of Claim 128.
137. (New) A method of preparing the PHA blend of Claim 128, wherein the method comprises blending the first PHA with the second PHA.

138. (New) The method of Claim 128, wherein the blending of the first and second PHAs is by solvent blending, emulsion blending or melt blending.
139. (New) The method of Claim 138, wherein the PHA blend is prepared using solvent blending.
140. (New) The method of Claim 137, wherein:
 - (i) the PHA components are dissolved in a solvent or solvent mixture, or the PHA components are dissolved separately in a solvent or solvent mixture and combined to form a blended PHA solution containing at most about 50 weight percent of the PHA components;
 - (ii) the PHA solution is applied to a surface to form a PHA blend solution layer on the surface; and
 - (iii) some or all of the solvent is removed to form a PHA blend layer on the surface.
141. (New) A method of making the article of Claim 140, wherein the method comprises molding the PHA blend.